

Briefing Statement

Bureau: National Park Service
Issue: A New Direction for Natural Resource Management
Park Site: Valley Forge National Historical Park
Date: August 23, 2007

Background:

As suburban sprawl increasingly covers the land surrounding Valley Forge National Historical Park, the natural resources within the park increase in value both as a refuge for plants and animals and as a destination for recreation and renewal for the public. Over 1,000 different plants and animals make Valley Forge home within a variety of habitats including streams, wetlands, forests, and meadows. In 2006, Valley Forge received over 1.2 million visitors with approximately 80% of park visitors pursuing primarily recreational experiences (e.g. hiking, biking, horseback riding). The many threats to natural resources, both from within and outside the park boundary, make a passive approach to management undesirable.

In 2007, the park completed a General Management Plan (GMP) that outlines a new direction for natural resource management focused on the long-term protection, preservation, and restoration of natural resources. Plan implementation will follow an adaptive management approach or structured decision making process that is based on the best available science. Adaptive management promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Monitoring of the outcomes of management actions both advances scientific understanding of natural resources and helps adjust policies or operations as part of an iterative learning process. Natural resource management will also focus on the development of partnerships, expansion of volunteer opportunities, integration of natural resource information into educational programming, and fostering connections with the scientific research community and the public.

Current Status:

- Through efficiencies and reallocation of funds, the park was able to fill the natural resources manager position in 2005, which had been vacant for three years. Filling this position has allowed the park to make substantial progress in addressing park priorities. In 2007, a full-time interpretive position was assigned to natural resource management for the purpose of developing formal natural resource educational programming for the first time in park history.
- Valley Forge is one of only three parks in the Northeast Region to begin development of a Resource Stewardship Plan (RSP) in 2008. A Resource Stewardship Plan is considered a critical planning tool linking the park GMP to the more detailed, 5-year strategic plan. This document will outline comprehensive strategies to achieve park-specific desired resource conditions and will be used as a template for developing detailed program and project needs and for determining the park's long-term needs for changes in budget allocations, funding outside of park base, and staffing capabilities. Development of quantifiable, measurable objectives also will serve to inform long-term monitoring geared toward evaluating success in achieving desired resource conditions – a key step in the adaptive management process.
- Valley Forge NHP began development of a White-tailed Deer Management Plan and Environmental Impact Statement in 2006. The substantial increase in deer population size within the park over the last two decades seems to correlate with significant changes in native plant communities and alteration of natural processes such as forest regeneration. The purpose of this plan is to develop a deer management strategy that supports long-term protection, preservation, and restoration of native vegetation and other

natural and cultural resources. The first internal draft of the plan is expected to be completed by the end of January 2008. Visit the park website at <http://www.nps.gov/vafo/parkmgmt/index.htm> for additional information.

- Valley Forge NHP contains one of the largest contiguous areas of natural meadows in southeastern Pennsylvania. Meadows are home to a variety of wildlife but are particularly important for grassland bird species, many of which are in decline across the United States. In 2007, the park received funds to complete an inventory of plant species in meadows and to map the location of invasive, non-native plants in cooperation with the Pennsylvania Natural Heritage Program. Knowledge of what plants occur here and the location of invasive, non-native plants will be used to guide immediate changes in the meadow mowing regime and to inform a new Meadow Management Plan in the future.

- The National Park Service must develop desired resource conditions for all of its landscape, watershed and key biological resources including upland watersheds, plant communities, streams, and threatened, endangered, and other species of concern. In 2007, Valley Forge took the initiative to develop desired resource conditions for selected forest communities and meadows. This effort included identification of measurable indicators that will be monitored or evaluated to determine success in achieving desired condition objectives. Desired conditions for Dry Oak Forests and Successional Tuliptree Forests were completed in cooperation with Nature Serve and can be obtained at http://www.nps.gov/nero/science/FINAL/VAFO_desired_forest/VAFO_DesiredForestConditions.htm. Desired conditions for meadows are currently being developed by Dr. Roger Latham, Conservation Biologist and are expected to be completed in early 2008. Current and future natural resource management actions will be geared toward reducing the current gap between existing condition and desired condition of natural resources and measuring progress to achieving resource condition objectives.

- The last two miles of Valley Creek pass through Valley Forge NHP to its confluence with the Schuylkill River in front of George Washington's Headquarters. Historically significant as a source of water and power, Valley Creek is also one of the park's most important natural resources. It has been designated an "Exceptional Value" Watershed by the Pennsylvania Department of Environmental Protection, affording it the highest level of protection. It has also been classified as a "Class A" Wild Trout Fishery by the Pennsylvania Fish and Boat Commission. These designations demonstrate the significance of this resource at the local, state and national level and to the residents of the watershed. Paving of the watershed outside the park has resulted in an increased frequency and intensity of flood events. Frequent flooding has led to the destabilization and collapse of streambanks, sedimentation, and alteration of water temperature and other water quality indicators. Valley Forge has adopted a whole-watershed approach to management of water resources, including Valley Creek, the Schuylkill River, and their tributaries. Implementation of this approach involves working with others such as the Valley Creek Restoration Partnership and Schuylkill Action Network on issues related to stormwater management, stream restoration, streambank stabilization, water quality monitoring, and education.

- Valley Forge NHP is also a member of the Valley Creek Trustee Council (VCTC) in partnership with the Pennsylvania Fish and Boat Commission. The Council was established under the "Superfund" Law when Valley Creek was found to be contaminated in the mid-1980's by polychlorinated biphenyls (PCBs), a well-known carcinogen. Monies to compensate for natural resource damages and lost angler use were received through legal settlements with the polluters and placed into a Restoration Fund administered by the VCTC. As of October 2006, the Restoration Fund stood at approximately \$1.5 million. The VCTC recently completed design of a grant program to distribute these funds for the purpose of watershed restoration. Additional information on this new opportunity can be found at www.savevalleycreek.org.

- Partnerships are integral to management's vision for the park and to successfully achieving natural resource management goals for resource protection. The park will be actively seeking new partnerships with organizations with compatible purposes and working to maintain existing partnerships. Existing partnerships exist with organizations such as the Valley Forge Chapter of Trout Unlimited, Delaware Riverkeeper, Pennsylvania Fish and Boat Commission, and the NPS, Mid-Atlantic Exotic Plant Management Team. Partnerships recently initiated include working with the John James Audubon Center at Mill Grove to provide natural resource interpretive programs within the park in summer 2007, and work with the Upper Merion Parks and Historic Foundation (UMPHF) to provide funding for and share a student intern in natural resources. The UMPHF selected Valley Forge NHP as the recipient of their 2006 Partnership Award.

- Volunteer opportunities in natural resource management have expanded significantly since 2005. The number of volunteer hours for natural resource management was 688 hours in 2005. In 2006, the number of hours increased 380% to 2,609 hours. Increase in number of volunteer hours is largely attributed to development of a natural resource internship program. Currently, three internship opportunities are provided in natural resource management, natural resource interpretation, and natural resource-law enforcement. The purpose of internships is to provide college-level students with a concentrated, practical experience in natural resource management that affords the opportunity to apply classroom theory through "hands-on" experience in the National Park Service. At the same time interns contribute to the collection of data and implementation of projects that benefit park resources and will assist park managers in achieving management goals.

Communications:

- Information on natural resources and natural resource management at Valley Forge NHP is available at <http://www.nps.gov/vafo> or by contacting the natural resource manager.

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